

Amendments to the Specification

Please insert the following paragraphs at page 7, between the first full paragraph, and “BRIEF DESCRIPTION OF THE DRAWINGS”, please insert the following paragraphs:

Still further, the present invention is also directed to a ceramic heater for heating a wafer comprising a ceramic substrate; a resistor heating body on a surface of said ceramic substrate or inside said ceramic substrate; a temperature measuring unit embedded in bottomed-holes formed on the surface opposite to a heating face of the ceramic substrate for measuring a temperature of the ceramic substrate; a control unit feeding power to the resistor heating body; a memory unit storing temperature data measured by the temperature measuring unit; a calculation unit calculating power to be fed to the resistor heating body from the temperature data; and the resistor heating body comprising two or more circuits capable of controlling the temperature independently, in which a temperature of a circuit located at an outer peripheral portion among the two or more circuits is controlled so as to be made higher than a temperature of a circuit located at an inner peripheral portion, and a wafer is heated while the wafer is separated apart from a heating face of the ceramic substrate.

Still further, the present invention is also directed to a method of controlling a temperature of a substrate in a ceramic heater for heating a wafer comprising a ceramic substrate; a resistor heating body on a surface or inside the ceramic substrate; a temperature measuring unit embedded in bottomed-holes formed on the surface opposite to a heating face of said ceramic substrate for measuring a temperature of the ceramic substrate; a control unit feeding power to the resistor heating body; a memory unit storing temperature data measured by the temperature measuring unit; a

calculation unit calculating power to be fed to the resistor heating body from the temperature data; and the resistor heating body comprising two or more circuits capable of controlling the temperature independently; the process comprising controlling a temperature of a circuit located at an outer peripheral portion among the two or more circuits to a temperature higher than a temperature of a circuit located at an inner peripheral portion and heating a wafer while the wafer is separated apart from a heating face of the ceramic substrate.